The Claims:

1. (Original) A system for scheduling events in a Boolean satisfiability (SAT) solver, the system comprising:

a first engine operable to collect one or more first-order statistics on a search for a valid solution to an SAT problem;

a second engine operable to derive one or more second-order statistics on the search from the one or more first-order statistics; and

a third engine operable to schedule events in the search according to one or more of the second-order statistics.

2. (Original) The system of Claim 1, wherein the events are restarts.

3. (Original) The system of Claim 1, wherein the events are variable reorderings.

4. (Original) The system Claim 1, wherein a first one of the first-order statistics indicates a first number of conflicts since a particular event and a second one of the first-order statistics indicates a second number of decisions since the particular event.

5. (Original) The system of Claim 4, wherein the particular event is a start or a last restart.

6. (Original) The system of Claim 4, wherein the particular event is a variable ordering or a last variable reordering.

7. (Original) The system of Claim 1, wherein at least one of the second-order statistics is a conflict-to-decision ratio (CDR).

8. (Original) The system of Claim 1, wherein the search for a valid solution to the SAT problem is associated with electronic design automation (EDA).

9. (Original) A method for scheduling events in a Boolean satisfiability (SAT) solver, the method comprising:

collecting one or more first-order statistics on a search for a valid solution to an SAT problem;

deriving one or more second-order statistics on the search from the one or more first-order statistics; and

scheduling events in the search according to one or more of the second-order statistics.

10. (Original) The method of Claim 9, wherein the events are restarts.

11. (Original) The method of Claim 9, wherein the events are variable reorderings.

12. (Original) The method of Claim 9, wherein a first one of the first-order statistics indicates a first number of conflicts since a particular event and a second one of the first-order statistics indicates a second number of decisions since the particular event.

13. (Original) The method of Claim 12, wherein the particular event is a start or a last restart.

14. (Original) The method of Claim 12, wherein the particular event is a variable ordering or a last variable reordering.

15. (Original) The method of Claim 9, wherein at least one of the second-order statistics is a conflict-to-decision ratio (CDR).

16. (Original) The method of Claim 9, wherein the search for a valid solution to the SAT problem is associated with electronic design automation (EDA).

17. (Original) Logic for scheduling events in a Boolean satisfiability (SAT) solver, the logic encoded in media and when executed operable to:

collect one or more first-order statistics on a search for a valid solution to an SAT problem;

derive one or more second-order statistics on the search from the one or more first-order statistics; and

schedule events in the search according to one or more of the second-order statistics.

18. (Original) The logic of Claim 17, wherein the events are restarts.

19. (Original) The logic of Claim 17, wherein the events are variable reorderings.

20. (Original) The logic of Claim 17, wherein a first one of the first-order statistics indicates a first number of conflicts since a particular event and a second one of the first-order statistics indicates a second number of decisions since the particular event.

21. (Original) The logic of Claim 20, wherein the particular event is a start or a last restart.

22. (Original) The logic of Claim 20, wherein the particular event is a variable ordering or a last variable reordering.

23. (Original) The logic of Claim 17, wherein at least one of the second-order statistics is a conflict-to-decision ratio (CDR).

24. (Original) The logic of Claim 17, wherein the search for a valid solution to the SAT problem is associated with electronic design automation (EDA).

25. (Original) A system for scheduling events in a Boolean satisfiability (SAT) solver, the system comprising:

means for collecting one or more first-order statistics on a search for a valid solution to an SAT problem;

means for deriving one or more second-order statistics on the search from the one or more first-order statistics; and

means for scheduling events in the search according to one or more of the second-order statistics.